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Tests And Measurements In The Beaumont Negro Schools

Lula J. Benson
Prairie View State Normal and Industrial College

TESTS AND MEASUREMENTS IN THE BEAUMONT NEGRO SCHOOLS

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Lula J. Benson

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DEDICATION

Because of his scholarly attainments, because of his wisdom and because of his high idealism which makes him a worthy exponent of the principles of truth, fair play, loyalty, patience, sincerity, industry, and kindred moral virtues; and because it is to him that I am, in a large measure, indebted for this opportunity of presenting these data, I dedicate this volume to Superintendent Emeritus-elect M. E. Moore, of the Beaumont City Schools.

PREFACE

The study herein presented is merely an attempt to show, in a very limited way, how tests and measurements have been used in the colored schools of Beaumont. The author is fully aware of the controversial issues, the criticisms surrounding the use of new type tests; and does not presume a knowledge even approaching the findings of the experts in the field of educational measurements. For anyone wishing to try out a testing program, an abundance of material is now available, with arguments for and against.

The compiler is deeply indebted to thousands of boys and girls, to the great number of teachers and administrators with whom she has worked and from whom she has learned. Supervisor T. T. Pollard of the Beaumont Negro Schools, graciously allowed the use of office records and gave valuable professional assistance. Members of the Charlton-Pollard High School Faculty who rendered helpful suggestions included Professor R. T. Tatum, Principal; Mrs. Aurelia Patillo-Smith, Librarian; and Mrs. C. L. D. Edwards, English Department, who contributed valuable assistance on the chapter on remedial measures. Miss Violette Slater, instructor in the Prairie View Extension School, furnished help in compil-

ing and arranging data. Professor J. C. Redd, Supervisor of Attendance, Beaumont Colored Schools, and formerly Principal of Pipkin Junior High School, in Beaumont, gave of his experience in the use of tests.

Grateful acknowledgment is due my advisor, Dr. G. L. Harrison, Head of the Department of Education, Prairie View State College.

The writer gives sincere thanks to these persons.

C O N T E N T S

C O N T E N T S

INTRODUCTION

PURPOSE OF THE STUDY: The purpose of this study shall be (1) to present some facts regarding educational tests, and (2) to show how the Beaumont City Schools have made use of these devices in the promotion of education.

SOURCES OF DATA:

Personal visits to schools at regular periods during the school year for the purpose of giving tests,

Questionnairs to teachers and principals in the Beaumont system, and

Reports of supervisor to Superintendent and review of literature on educational research furnished the data for this thesis.

DEFINITION OF THE TERM--TEST:

In defining the term test, it has been stated that previous to the appearance of the standard tests and scales, test was synonymous with examination or written review. A test consisted of a number of questions selected by the teacher, and covering what she thought to be the important points of the subject studied. But with the introduction of the standard scales the word test has taken on a new meaning--a meaning which, superficially, appears very thoroughly to differentiate it

from the ordinary school examination. Many teachers and administrators are still skeptical of the value of the new tests advocated by educationalists and psychologists. These practical schoolmen are skeptical not only of the practical value of the results obtained by the use of these tests, but of the essential soundness of the present test movement. There is a feeling that testing is a time-consuming, artificial, and one-sided way of obtaining information which the teacher may acquire much better by her own observation of her pupils and their work. These circumstances make it necessary that the exact nature of the tests and the advantages of the test method should be thoroughly understood.... Tests, as the term is now used, are not merely a very special method to be used only on special occasions. Instead, the new tests are the result of an effort to avoid certain limitations and failings of the usual written examinations.... And, far from being a special method to be used only rarely, tests should be part of the equipment of every school, because tests will do much that has heretofore been done not at all or not so well by the usual examinations given by teachers or principal.[1]

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1 Pressey, Sidney L. and Luella Cole. Introduction to the Use of Standard Tests. World Book Company, Yonkers-on-Hudson, New York, 1923.

DISTINGUISHING FEATURES OF A TEST

Three distinctive features of the "test," as compared with the usual school examination, are here pointed out:[1]

I. CHOICE OF SUBJECT MATTER OF STANDARD TESTS

1. A good test covers only the really important points of a subject. (Extreme care used in selection of materials.)

2. Not only is the importance of the questions in a standard test determined, but also their relative difficulty.

II. PROCEDURE IN GIVING, TAKING, AND SCORING THE "TEST"

1. The way in which the test should be given is specified in detail. (Directions for giving a standard test are to be read verbatim, as prescribed by the author of the test--thus rendering the conditions for testing perfectly constant--or identical--from class to class, no matter where or by whom the test is given.)

2. There is also careful control of all factors which might, after the directions were given, affect a child's work on the tests. (Instead of requiring a good deal of written work, the child underlines, crosses out, or does something of that sort which will not give any considerable advantage to the child who writes rapidly, or the child who expresses himself as easily on paper as in a recitation.)

3. The scoring of a good "test" is quite as unmistakable and clearly defined as the procedure in giving. (Objectivity versus loose methods of usual examination paper marking.)

III. SAVING OF TIME AND LABOR

It is not intended from the above that examinations set by the teacher should be abolished. The teacher's examination has its own distinctive service to perform. Tests should not completely take the place of the usual examination; they should, rather, be used to render service which examinations cannot. They may even be

of service to teachers in an examination or quiz. The best tests serve not merely as measuring instruments. Certain indirect values are quite as important. The test formulates in very concrete fashion the minimal essentials in a subject, makes clear the teaching objectives, and introduces the teacher to scientific methods which she will find valuable in all her work.

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1 Ibid.

HISTORICAL SURVEY

PLACE OF MEASUREMENT IN EDUCATION

SOURCES: The origins of the test movement as applied to mental capacity are lost in the distant past. We can find in the initiation ceremonies of primitive and savage peoples tasks involving mental as well as physical prowess, and we have in early Greek history mention of a very momentous mental test. In the year 413 B. C. some seven thousand survivors of the ill-fated Athenian army in Sicily were thrown into the quarries near Syracus, and it is recorded that in many cases their very lives and their release from the agonies of their imprisonment depended upon their ability to repeat verses of Euripides.

EARLY EDUCATIONAL TESTS: The earliest reported use of objective educational tests is that brought to light by Dr. Issac L. Kandel and reported by Thorndike in 1913. It is therein shown that the Reverend George Fisher, a schoolmaster in England, was the author of a scale book in 1864 wherein questions and samples were given, enabling a numerical grading on an objective scale in "writing, spelling, mathematics, navigation, Scripture, knowledge, grammar, and practical science."

Tests of a fashion have been applied to determine mental or educational success from the very first beginnings of educational endeavor.

About the middle of the nineteenth century the scientific movement broke into the almost static condition of institutions of learning, and, by 1900, a veritable revolution was taking place in the established order of education. New curricula were displacing the old, modern methods were being encouraged, textbooks were being re-written, buildings were being scientifically constructed, and a new philosophy of education was evolving.

Of all the new developments in the educational field, the "Scientific Testing Movement" was perhaps the most important, at least in scope and interest. The first real scientific intelligence test was devised, in 1906, by Alfred Binet, a noted French Psychologist, in Paris, France. It was not very satisfactory and consequently was immediately revised, and, in 1908, was given to the field of education. This latter date is usually accepted as the beginning of the movement. The underlying principles of the movement were that of setting up a new definition of intelligence and then devising a scale for measuring it. A similar interest arose in the matter of more accurately measuring school achievement, than was possible under the old method of teacher judgment.

From its beginning with Binet, in France, the interest almost immediately challenged all continental Europe and America. The scale was introduced into America by H. H. Goddard, in 1911, by making use of the tests at the School for the Feebleminded at Vineland, New Jersey. From here the interest spread rapidly to all sections of America. The individual test, at first the ideal, gave way, in 1915, to a new method of group testing devised by Otis.

The greatest impetus to the movement came with the advent of the World War, during which time, 700,000 soldiers and officers of the United States Army were given intelligence tests in order, as was maintained, "to place the right man in the right place." After the close of the war the interest spread even more rapidly, and it has been estimated that twenty million tests had been sold by 1923.

New interest developed and numerous tests were devised such as trade tests, specific abilities tests, mental alertness tests, will-tempera-

ment tests, character tests, and multi-mental tests. Quantity, at first, seemed to be the slogan, but this apparently gave way about 1923 to the desire for quality; and the investigation turned to testing the tests themsleves to discover their reliability, their power of accurate analysis, and to discover their correlations with other criteria of measurements.

Scientific tests have been used in almost every field of human activity. They are being used in public schools for testing the inferior child; for testing the superior child; and for prognostication and classification. They are likewise being used for ascertaining community differences, for comparisons of different schools, for general educational surveys, and for educational and vocational guidance. In colleges we find them being used for comparisons of grade norms, for college entrance requirements, for classification of students, and for vocational and educational guidance. As a military device, use is made of them in the classification of soldiers, for administrative purposes, for the selection of superior men as officers, and for the segregation of men obviously unfit mentally for service. In business and industry we find tests being used for securing competent executives, for ascertaining capacities to perform as well as to learn particular types of work, and for the detection of capable leaders of men in sales organizations and the like.[1]

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1 Limmer, A. M., Development of Scientific Testing In America. In the Texas Outlook, June 1931.

PLACE OF MEASUREMENT IN BEAUMONT SCHOOLS

LAUNCHING THE PROGRAM

When Superintendent M. E. Moore took charge of the Beaumont City Schools in 1919, he early set in motion his plans to organize a testing program to be used in the schools of Beaumont. A Supervisor of Tests and Measurements was appointed for the white elementary schools; and Supervisor T. T. Pollard was placed over that phase of work in the colored schools.

In the spring of 1920, assisted by Mrs. Marion Chumley (Trotter-Gonzales), Misses Wilma Dellams, Sadie Patillo-Karrey and the author of this thesis, Supervisor Pollard launched the testing movement in the Negro Schools of Beaumont.

Among the early tests administered were: Courtis' Practice Tests in Arithmetic, Thorndike-McCall Reading Test, Woody-McCall Mixed Fundamentals Test, and Ayers' Spelling Scale.

REACTION TO TESTING PROGRAM

This innovation in educational practice was received in varying ways. To say that it was viewed with suspicion on the part of some of the teachers is to put it very mildly. It was not pleasant to attempt to give tests in the early days. One could hardly go about the business of administering tests according to the de-

tailed instructions that accompanied each test without being assailed with queries (sincere and anxious) from some of the teachers who wanted to know what it was all about--as if we knew.

Naturally, this anxious attitude was reflected in the pupils of such teachers; and frequently, the said pupils did not even try, disposing of the entire matter by saying, "I haven't had that," and like expressions. Gradually, however, the testing program was taken for granted, and suffered as a necessary evil, much as having to see the dentist or the family doctor on occasions. This phase, too, wore away with the passing of the years during which the many types of tests have been administered. For the past eight or ten years, responses have been quite favorable, as regards the pupils tested; and many teachers have requested certain testings of their pupils off the regular testing schedule--for purposes of remedial instruction.

It was the exception, however, rather than the rule that principals carried the testing work in their schools to the fine point indicated by the following report of one of the school administrators to the superintendent:

> I have tested all of our pupils above the second grade four times this year, using the Detroit Reading Tests, Woody-McCall Fundamentals of Arithmetic, Wilson Language Error Tests, Forms A, B, and C; Otis Reasoning Arithmetic, Forms A and B. The scores for the pupils of ..... School compare very favorably with the standards set up for the pupils in the United States where these tests have been given and scored. A copy of the achievement of each pupil is kept on file in the office of the principal.[1]

SURVEY OF THE BEAUMONT SCHOOLS

In 1926-27, directed by George Drayton Strayer, eminent psychologist, the Institute of Educational Research, Division of Field Studies, Teachers' College, Columbia University, made an extended survey of the Beaumont Schools. (Our testing program was then about six years old.) Chapter V of the Report of the Survey, issued in 1927, contains the following statements:

> As a result of the excellent achievement test program in Beaumont, the survey staff had available a wealth of material upon which to judge pupil achievement. The Stanford Achievement Test had been administered to the school children of Beaumont just prior to the beginning of the survey. This test is a combination of nine subject tests, dealing with reading, arithmetic, history and literature, nature study, science, language usage, and spelling. Standards based upon the results obtained by thousands of pupils throughout the country are available for comparing results.
>
> The test papers, which had been scored but not checked, were turned over to the survey staff for checking. Some errors were found, but they were of such nature that they did not change the total results. The survey staff administered, also, a number of additional standardized tests

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1 From the Annual Report of the Superintendent of Schools to the Board of Education, Beaumont Independent School District. 1929-30.

to pupils selected at random, to check the results obtained from the Stanford Achievement Tests. The results obtained from the check tests agreed substantially with the results obtained from the Stanford Tests. It may be concluded, therefore, that the test results submitted by the school authorities reveal the true condition of the children of Beaumont with respect to their abilities in the usual school subjects.

PUPIL ACHIEVEMENT IN BEAUMONT - COLORED SCHOOLS

(From the Report of the Survey of the Schools of Beaumont, Texas, Made by the Institute of Educational Research, Division of Field Studies, Teachers' College, Columbia University. George D. Strayer, Director.)
1927

As the colored school children had not been included in the testing program administered by the local school authorities, the survey staff administered the same (Stanford Achievement) test to a sampling of colored children from each of three colored schools. The fifth grade was selected as the most representative grade in ..... and .....schools, and the seventh grade in the .....school. Table I shows the findings for the colored schools.

TABLE I

ACHIEVEMENT RESULTS BY HALF GRADES EXPRESSED AS GRADE SCORES AND COMPARED WITH THE DECEMBER STANFORD NORMS

Three Beaumont Colored Schools

1926

	School 1		School 2		School 3	
			G R A D E			
	5 Low	5 High	5 Low	5 High	7 Low	7 High
Reading	4.0	4.7	4.0	3.6	5.0	4.8
Beaumont	99.9	125.8	95.0	82.2	132.0	127.0
Stanford	125.0	139.0	125.0	139.0	171.0	180.0
Arithmetic	4.4	5.2	4.5	4.9	5.2	5.1
Beaumont	126.5	157.0	131.8	144.2	160.4	157.0
Standard	140.0	159.0	140.0	159.0	196.0	210.0
Nature Study and Science	4.0	5.0	3.7	3.6	5.0	5.1
Beaumont	20.5	33.0	15.0	13.2	33.5	35.0
Stanford	30.0	36.0	30.0	36.0	54.0	59.0
History and Literature	4.0	4.2	3.7	3.6	4.6	4.8
Beaumont	11.6	13.0	8.5	7.8	17.0	20.0
Stanford	19.0	24.0	19.0	24.0	39.0	46.0
Language	4.1	4.9	4.2	4.2	6.2	6.0
Beaumont	12.7	18.5	13.6	13.0	25.8	25.0
Stanford	17.0	21.0	17.0	21.0	28.0	31.0
Spelling	4.8	5.4	5.6	5.6	5.7	5.5
Beaumont	90.4	105.5	110.4	108.8	113.0	108.0
Stanford	89.0	101.0	89.0	101.0	132.0	144.0
Total Grade Score.....	4.0	4.9	4.4	4.4	5.3	5.2
Beaumont	31.8	44.5	38.2	27.4	49.6	48.0
Stanford	42.0	48.0	42.0	48.0	62.0	67.0
Number Cases	27	23	34	35	62	34

This is the standard given by the authors of the Stanford Test for the third month of the fourth school grade.

COMMENT ON ACHIEVEMENT RESULTS

These results show that the pupils in the elementary schools are up to standard in spelling for their present school grades. In other subjects, they do not attain the standards. There are two conditions that must be considered in interpreting these results. On the one hand, the standards are based on testing in which white children largely predominated. On the other hand, the Beaumont children are older than the children upon whose tests the test standards are based. The median age of thelow-fifth-grade pupils in colored schools in Beaumont is 12 years. The median age of the low-fifth-grade pupils in white schools is 10 years, 10 months.

TYPES OF TESTS USED IN THE BEAUMONT NEGRO SCHOOLS

Tests administered in the Beaumont schools may be roughly divided into three classes:

1. Psychological Tests

For measuring general ability (the ability to learn), we have used Intelligence Tests, examples of which are: Otis Self-Administering Tests of Mental Ability, National Intelligence Tests, Miller Mental Ability Test, and Pintner-Cunningham and Kingsbury Group Intelligence Tests for Primary Grades.

National Intelligence Tests

Table II
Results of Test in Three Beaumont Elementary Schools

Grade 5's	No. Pupils	Grade Standard	LS[x]	First Quartile	Median	Average	Third Quartile	HS[x]
School 1	48	84	14	36	50	52.7	66.5	109
School 2	78	84	12.5	34.2	44.5	44.7	54.2	77
School 3	40	84	30	47.5	55	57.3	67.5	88
Grade 5"								
School 1	41	89	20	54	63	66.6	87	120
School 2	36	89	24	40	51.5	53.2	68	91
School 3	33	89	29	71	83	78.6	91	112

[x] LS, Lowest Score and HS, Highest Score.
IQ's were computed for each pupil, and percentile graphs drawn for each class.

COMMENT ON RESULTS

The class medians in both grades and in all schools are below the norms or grade standards, which were obtained from measuring 7,530 white pupils.

Pintner-Cunningham Test

This test was given for the purpose of obtaining the IQ of certain pupils in the elementary schools.

Pupils whose IQ exceeded 110 were placed in A group, those from 110 to 90, in B group, and those with IQ's of less than 90 were placed in the C division. Each teacher was given two divisions, an A and a B, or a B and a C, so that each

teacher had one average class.

In considering these grouping, it is entirely erroneous to regard them as different levels of intelligence. They are merely representative of different rates of speed. School subjects cannot measure intelligence. There are many known cases of individuals who were very slow in learning school subjects but very fast in learning other subjects of greater importance to the world. Among these are many authors, inventors, statesmen and business men. A child may be fast in one subject and slow in another. It is the simplest of common sense, according to best practice, to separate or classify children for learning purposes into teams according to their subject-speed.

The initial test was not, of course, to be considered final in regard to the placement of any child. Teachers were to watch closely and note all pupils whose tests did not properly place them. A second test would be given these pupils. Constant adjusting would be necessary, but pupils of all levels, A, B, or C, would be expected to make the grade next highest by the end of the year--with the possible exception of such pupils who were found extremely slow mentally although chronologically of school age. These would probably repeat.

2. Educational Tests

For measuring general achievement, we have for several years used Stanford Achievement Test. (The achievement test constituting Part I of the Otis Classification Test is another example.)

For measuring achievement in a specific school subject (reading, arithmetic, etc.) we have used Subject Tests (Reading Tests, Arithmetic Tests, etc.), examples of which are: Detroit Reading Test; New Stanford Geography (and other subject) Tests.

For determining specific weaknesses and the causes of them (such as inability to borrow in subtraction), we have used Diagnostic Tests. Examples of these are: Wilson Language Error Test and Woody-McCall Mixed Fundamentals in Arithmetic.

For measuring potential ability or aptitude in a subject, we have used Prognosis or Aptitude Tests, such as Stenquist Mechanical Aptitude Test. (This test was used only once to my knowledge, and that was during the Survey of the Beaumont Schools by the Columbia experts, and described elsewhere in this volume.

Stanford Achievement Test

Every year we seek to measure the work of our schools in giving the children command over the fundamental processes, or the use of the tools of learning--

another title for the "Three R's." We do this by means of standardized tests so that we may make comparisons with national medians or standards.

The stanford Achievement Tests cover the fundamental processes under the following items:

1. Reading: Paragraph Meaning
2. Reading: Sentence Meaning
3. Reading: Word Meaning
4. Arithmetic: Computation
5. Arithmetic: Reasoning
6. Nature Study and Science
7. History and Literature
8. Language Usage
9. Dictation Exercises

These tests, revised from year to year, have been used in the Beaumont schools for fourteen consecutive years. On the first page of each examination booklet is an Educational Profile Chart upon which results of each pupil's achievement are drawn. Such graphs show in which subjects a pupil is strong or weak. The subjects in which occur the greatest number of individual weaknesses are then tabulated, and given to the principals of the different schools--together with suggestions based on our findings.

Other unclassified tests that have been given:

The Detroit Reading Tests

Haggerty Reading Tests

Thorndike-McCall Reading Tests

Stone Narrative Reading Tests

New Stanford Reading Tests

Wilson Language Error Tests

Pressey Tests in (the mechanics of)English

New Stanford Language Usage Test

Leonard Diagnostic Tests in English

Miller Mental Ability Test

Goodenough Intelligence Test

Illinois General Intelligence Test

Detroit First-Grade Intelligence Test

Brown-Woody Civics Test

Witham Geography Tests

Tests in Handwriting (I do not recall the scale)

Otis Standard Practice Tests in Arithmetic

Morrison-McCall Spelling Tests

Clapp-Young English Test

Tests on hand, but which have not been given includes:

Washburne Diagnostic Tests in Arithmetic

Iowa Silent Reading Tests

Note: It is not be understood that these have been given in one year, or even in two or three years; but over a

period of several years, and for varying reasons.

3. Physical Tests

Pupils deficient in reading ability were given eye and ear tests.

AUDIOMETER AND EYE TESTS

> The school men of the state and nation agree, with few exceptions, that modern and efficient apparatus for measuring the sight and hearing of school children should be made available to every school... Many children have low learning levels or slow rates of speed because of bad sight or hearing. A child will not usually reveal these weaknesses. In many cases, children do not know that they possess them. If such defects are discovered early enough in the child's life, either one of two things can be done--the defect can be removed or steps can be taken to make the child's instruction efficient in spite of the defect.
>
> From Report of Committee on Research to the Department of Superintendence, Texas State Teachers Association, 1929. M. E. Moore, Director for Research in Child-Accounting

To students who have been found retarded in the tool subjects, audiometer and eye tests are given. The information gained from these diagnoses is given to the teacher of the subject wherein the pupil is found deficient.

HOW THE TESTS WERE GIVEN

On the floor of the examination room (clinic of Charlton-Pollard High School), a diagram was drawn similar to the following, each numeral representing one foot:

0	1	2	3	4	5	6	7	8	9	10

Holding a stop watch in his hand, the examiner stands at Zero, the subject at 10. Assured that the subject cannot hear the ticking of the watch at a distance of 10 feet, he is told to step on the 9-foot line and listen. He continues stepping nearer one foot at the time, until he does hear the ticking of the watch. Fun at the expense of the subject is injected in the examination when the subject declares he hears the watch when the examiner knowsthe watch is not ticking. Perfect hearing is recorded at 10 feet.

In the clinic of Charlton-Pollard High School there is a Green Test Cabinet. The subject is placed ten, fifteen, or twenty feet away from the cabinet. The examiner stands beside the pupil, holding the edge of a card against the nose, but not touching the eye. An assistant points to the letters or characters to be read. Both eyes are tested in this way. If the pupil

is unable to read at this distance, he is moved nearer the cabinet. Each chart explains at what distance the pupil should be able to read. If he cannot read at the required distance, he is advised to consult an eye specialist.

A study of 21 retarded pupils in one of the elementary schools and 40 in another who were subjected to these tests in December, 1933, revealed the following facts as shown in Table III.

Table III

AURAL TEST		VISUAL TEST	
No. Pupils	Percent Defective	No. Pupils	Percent Defective
5	00	1	00
4	10	8	10
6	20	3	20
9	30	9	30
15	40	7	40
6	50	9	50
7	60	14	60
8	70	5	70
0	80	0	80
0	90	3	90
1	99.5	1	99.5

Of the 61 pupils given the aural test only 5 en-

joyed normal hearing. Of those given the visual test, one had normal vision.

The children with high percentage of defect in vision were given special attention. First, the teachers were informed as to the test findings; and in most cases the co-operation of parents, teachers and the school health officials resulted in remedial work. Glasses were recommended and procured for several.

Those suffering defective hearing were given places in the classroom where they could hear with less difficulty.

EXPERIMENTS IN TEST CONSTRUCTION

A STANDARDIZED ARITHMETIC TEST FOR NEGROES

In December 1928, at a meeting of the Beaumont Administrative Conference, an effort was launched to construct a standardized test in arithmetic for use in Negro schools. Teachers of grades 1 to 7 inclusive, in all the schools were requested to hand in to the supervisor of colored schools 10 questions of her own selection for each grade--to be used as a basis for testing the pupils in the subject under consideration. To aid in the process of elimination, teachers were instructed to place a value on each problem submitted.

From the several "sets" of questions submitted, the supervisor selected what he considered the best set for each grade to be tested; prepared mimeographed copies of the selected groups of questions, and gave them to the teachers of grades 2 through 7, with instructions to administer the tests to their respective classes and make a report which would show the number of pupils taking the tests, the number of times each question was answered correctly, and the percent of correct answers made to each problem.

Selected sets of questions for grades 2 and 3 were as follows:

ARITHMETIC: Grade 2

1. Mary and her mother picked some flowers. Each of them picked 7 roses. How many did both pick?

2. A dozen little cakes cost 12 cents. How much will 2 dozen cost?

3. If two spoons are placed at each plate, how many spoons will be needed to set the table for 9 people.

4. A hen had 13 little chickens. A cat caught 6 of them. How many little chickens did she have left?

5. There are 5 school days in a week. How many school days are there in 3 weeks?

6. Jack ate 2 hot cakes for breakfast each school morning for a week. Altogether he ate how many cakes?

7. Take me away from 12. 8 is left. I am_____.

8. 4 boys broke a window. The window cost $8. How much did each boy pay?

9. At 7 cents a qt., how much will 2 qts. of milk cost?

10. Helen bought a pair of new shoes. The price was $10, but the man let her have them for $3 less than the regular price. How much did she pay for the shoes?

ARITHMETIC: Grade 3

1. My mother bought a quart of milk every day in November. How many quarts did she buy? How many gallons?

2. Express your age in Roman Notation.

3. We pay $12 per month for rent; how much is this per year?

4. A school paid $89 for a victrola, and $8.76 for records. How much was spent in all?

5. John's mother gave him a dollar bill for Christmas. John bought a toy aeroplane for 25cts., a Jack-in-the-box for 9cts., and some school colors for 8cts. How much did he spend? How much did he have left?

Grade 3 (continued)

6. In a box there are 96 eggs. How many dozens are there?

7. When oranges sell at 40 cts. a dozen, how many oranges will a dime buy?

8. A stick 12 feet long is how many yards long?

9. During the Community Chest Drive Mary gave 9 cents, Tom gave 11 cents, Ellen gave 4 cents, John gave 14 cents, Jack gave a dollar, and the teacher gave $2.60. How much money did we raise?

10. John's father had ½ dollar in one pocket, ¼ dollar in another pocket and a dime in his hand. How much money had he?

On February 6, 1929, complete reports which showed the number of children tested in each grade, and the number of successes for each problem in the test, were studied and discussed, grade by grade.

Grade 2 for the three elementary schools showed pupil reactions about as follows:

Table IV

PUPIL ACHIEVEMENT IN 3 SCHOOLS

266 Second-Grade Children

School	1	2	3	Total
Pupils Tested	97	92	77	266
Items Problems Solved:				
1	75	86	77	238
2	74	53	72	199
3	27	53	61	141
4	59	73	69	201
5	60	75	61	194
6	53	65	69	187
7	61	74	64	199
8	25	66	64	155
9	65	67	65	197
10	43	71	71	185

This table shows that 75 of the 97 pupils in school number 1 solved item (problem) 1 of the test; 86 of the 92 in school number 2 solved item 1, and 77

(or 100%) of the pupils in school number 3 solved item 1, and so on.

In making this experiment the Council used suggestions on measuring results in education by McCall, who summarized the steps in the process of constructing a standardized test as follows:

1. Select examples varying in difficulty from easiest to most difficult.
2. Try examples out on a large number of pupils (give test)
3. Compute percent of pupils correctly solving each example.
4. Subtract each percent from 50 to reduce to Sigma.
5. Get Sigma distance from foot of scale (to reduce to stick)
6. Evaluate, (get the value of each example.)

McCall: How to Measure in Education

Reports from all schools and for each grade concerned were compiled and a new percentage governing the entire group was figured. (Percentages were found by dividing the failures by the successes or by dividing the successes by the total number of pupils tested.

In this work, splendid co-operation was given by principals, faculties, and the Council.

TABLE V

PUPIL RESPONSES IN TERMS OF DIFFICULTY

GRADE TWO			GRADE THREE		
Problem	Successes	Failures	Problem	Successes	Failures
1	238	28	2	221	77
4	201	65	3	170	128
2	199	67	1	164	134
7	199	67	8	149	149
9	197	69	6	147	151
5	194	71	10	145	153
6	187	79	7	129	169
10	185	81	4	120	178
8	155	111	9	112	186
3	141	124	5	107	191
Total Pupils			Total Pupils		
266..... Tested			..... Tested		298

238 pupils in grade 2 solved item 1.

The Council discussed the results made by Grades 2 and 3, and selected 10 questions from the two sets to be given to second and third-grade pupils in all the schools.

The test was given as outlined, and results in degrees of frequency studied.

A scale was made, and six of the ten problems were selected to make the "Standardized Test" for Grades 2 and3.

Each of the six questions was given value as to the degree of frequency of correct answers.

The finished test follows this page.

The Test for Grades 4 - 7, inclusive

Similar procedure was followed in construction of the "Standardized Test in Arithmetic" for Grades 4 -7, inclusive. That is, lists were made up by the supervisor showing the number of pupils taking the tests, and the number of times each question was answered correctly in the entire group of children in the four schools in grades 4, 5, 6, and 7. Results were discussed in the Administrative Conference, and 10 questions were selected to be given, as the next step.

Results of the above mentioned test, questions of which were answered correctly in degrees of frequency, were discussed. A scale was made, and 5 of the 10 questions selected as the final test. Each of the 5 questions was given value as to the degree of frequency of correct answere.

On the basis of the test results norms were set up for second and third grades of all the schools (separatly). The questions in each were given correct value.

PUPIL RESPONSES GRADES 4 and 5

Table VI

GRADE FOUR

Problem	Successes	Failures
1	221	2
6	192	31
2	187	36
3	162	61
5	130	93
4	125	98
7	104	119
8	104	119
10	71	152
9	23	200

No. Pupils: 223

Table VII

GRADE FIVE

Problems	Successes	Failures
1	137	49
7	131	55
13	119	67
14	108	78
8	105	81
3	102	84
16	101	85
5	100	86
4	99	87
2	94	92
6	93	93
12	87	99
9	81	105
20	70	116
18	66	120
19	66	120
11	64	122
17	62	124
10	50	136
15	28	158

PUPIL RESPONSES GRADES 6 and 7

Table VIII

GRADE SIX

Problems	Successes	Failures
14	82	10
2	67	25
5	63	29
13	62	30
7	50	42
6	41	51
10	40	52
1	28	64
3	23	69
4	23	69
8	23	69
12	23	69
20	19	73
11	16	76
16	11	81
9	6	86
18	4	86
17	3	89
15	0	92
19	0	92

No. Pupils: 92

Table IX

GRADE SEVEN

Problems	Successes	Failures
2	52	48
6	31	69
10	29	71
4	14	86
8	9	91
9	6	94
11	6	94
3	5	95
5	1	99
15	1	99
20	1	99
1	0	100
7	0	100
12	0	100
13	0	100
14	0	100
16	0	100
17	0	100
18	0	100
19	0	100

No. Pupils: 100

MEDIANS MADE ON ARITHMETIC TESTS
GRADES TWO to SEVEN
Beaumont City Schools

Table X

Grade:	SCHOOLS No. 0	No. 1	No. 2	No. 3	City (As a whole)
2	-	8.2	7.7	8.1	7.3
3	-	9.6	8.2	11.1	10.2
4	-	5.3	4.9	4.9	5.0
5	-	4.9	5.3	7.0	5.4
6	5.6	-	5.0	-	5.0
7	5.9	-	-	-	5.9

In the spring of 1929, the "Standardized Tests" were given to the children of the Martin School, in the French School District, Beaumont. The tests were given from the office of Supervisor Pollard, the papers graded by the same persons, and the norms figured for each grade and for each school in order to compare results. In this school, the norms fell a little below the norms for each grade of the city schools.

In the same year, the tests were given to the pupils of the Hebert School, in the South Park District, Beaumont. This school reported high scores on this test, some of the scores exceeding the scores made by the same grades in Beaumont city schools.

EXTRACTS FROM THE MINUTES of the Administrative Council

Principals of other cities have written regarding the standardized Arithmetic Tests worked out by the Council last spring. It is the plan to give these tests to other groups of children than those of Beaumont, if the principals will co-operate. A letter from the superintendent was requested that will recommend the use of these tests for research work to city superintendents of these cities.[1]

Letters have been written to the principals and superintendents of surrounding cities regarding the standardized tests in arithmetic worked out by the Council last spring.[2]

The test has been administered to the Houston Colored Schools. Results are valuable, as they bring in a large group of children. The results show the Beaumont schools rank a little higher than the Houston schools in this work. A letter was received from Galveston requesting the test be given in the Galveston schools. Tests have been sent to Miss Grace E. Stewart at Salina, Kansas, with rules for giving them to the children. Results will be reported back.[3]

Arithmetic test has been given in Galveston.[4]

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1 Minutes of the Administrative Council. September 18, 1929. p. 74.
2 Ibid. October 2, 1929. p. 75.
3 Ibid. January 8, 1930. p. 87.
4 Ibid. January 14, 1931. p. 102.

MEDIAN SCORES ON ARITHMETIC TESTS

Table XI

School	GRADES 2	3	4	5	6	7	No. Pupils
Beaumont City	7.3	10.2	5.0	5.4	5.0	6.0	1244
French School Dist.	4.6	6.0	4.4	4.7	5.0	5.3	112
South Park Dist.	11.3	5.7	5.3	5.1	6.0	6.0	168
Houston City	5.9	6.4	4.3	4.7	5.0	5.8	3647
Galveston City	4.7	4.4	4.4	4.7	4.8	5.0	245
Dunbar(Salina, Kan.)	---	4.6	5.0	4.5	5.1	5.1	44
						Total	5460

BATTERY OF TESTS

On January 4, 1933, the Administrative Council decided to construct a battery of tests for grades 3, 4, and 5 in one group, and for grades 6, 7, and 8 in another group. These were planned to include reading, language, arithmetic computation, geography-history, health-physical education, and spelling. Each teacher was told to select 10 questions on her subject in each of her grades, give them to the proper grade, and to mark the questions as answered or failed.

Teachers of the same subject in the same group (that is to say, spelling teachers of grades 3, 4 and 5; language teachers of the same grades; arithmetic teachers, health teachers, or teachers of any other subject of third, fourth and fifth-grade children) met with the supervisor, and arranged questions according to difficulty. Similarly, for teachers of the same subject in grades 6, 7, and 8.

ILLUSTRATION: Taking spelling for grades 3, 4, and 5, as an instance, there were three teachers (one from each elementary school) with 10 questions each for each of the three grades represented in the group-- 30 questions per teacher-- a total of 90 questions (or words that had been dictated). The words selected by the three schools follow on the next page.

School No. 1	School No. 2	School No. 3
their	always	debate
there	buy	visitor
uncle	which	repair
built	shall	trouble
bought	there	watch
bear	believe	entertain
bare	separate	bring
which	their	party
buy	hoarse	stable
Wednesday	Tuesday	carry
which	Wednesday	running
brought	February	responsible
separate	month	search
answer	piece	honor
question	straight	destroy
meant	whole	theater
newspaper	sugar	judge
does	been	invitation
business	busy	their
coming	through	busy
whether	grammar	wonder
straight	choose	contains
piano	lose	object
which	business	accept
business	any	occupy
avenue	don't	operation
writing	could	session
friend	ache	recent
brought	pencil	prove
erase	loose	worth

A list was compiled by the teachers, showing the percent of pupils spelling each word in her list. The new list appeared somewhat like this:

PERCENT OF PUPILS SPELLING CORRECTLY

Word	School 1	School 2	School 3
1	89%	89%	72%
2	87	96	54
3	89	83	69
4	90	82	68
5	81	91	78
6	86	95	49
7	70	82	88
8	94	86	85
9	86	76	86
10	93	59	86
11	95	59	76
12	75	79	44
13	67	51	42
14	86	55	43
15	65	73	47
16	83	69	49
17	82	82	54
18	87	76	32
19	79	93	60
20	87	93	61
21	69	93	78
22	56	82	67
23	34	82	69
24	86	78	55
25	73	96	30
26	44	81	22
27	84	54	21
28	83	56	52
29	68	69	80
30	50	57	71
No. Pupils	258	364	210

As a basis for the selection of the words (or problems, or items) that would make up the final test to be used in the Battery, the percentages were arranged in

ascendingorder. In this way, it was easily seen that the highest percent recorded fell in School Number 2, and that 96% of the 364 pupils tested spelled correctly words number 2 and 25 in the list given by that school. Referring to the spelling lists, it will be found that these words are "buy" and "any." The next highest percent, 95, is found in School number 2, and also in School number 1. Thus, 95% of the pupils in School number 2 spelled correctly word number 6; and 95% ofthe 258 pupils in School number 1 spelled correctly word number 11 in the list from that school. These words are "believe" and "which," respectively. This process was continued until 10 words for each grade (Grades 3, 4, and 5), or a total of 30 words had been selected for the battery test.

COPY of the SELECTED LIST: DICTATION

1. buy	11. visitor	21. business
2. any	12. busy	22. Tuesday
3. believe	13. friend	23. choose
4. which	14. party	24. separate
5. been	15. writing	25. whole
6. sugar	16. shall	26. month
7. bare	17. there	27. piece
8. don't	18. straight	28. ache
9. always	19. through	29. loose
10. could	20. grammar	30. Wednesday

This list was arranged according to difficulty and given to the entire student body in the same group.

While work in making the spelling test alone is illustrated, the same procedure was followed in handling all the subjects that went into Form I, or that part(or group) of the "Battery" designed for Grades 3, 4, and 5.

When we came to Form II, constructed for use in Grades 6, 7, and 8, and which consisted of five items instead of six--as in the case of Form I-- construction was carried on in much the same manner.

As each item of Form I and Form II was completed, the tests were given to the entire student body in the same group, as was done in the case of the Spelling Test.

The AIM here was not to secure comparative data with outside schools; but it was to measure children with children, and to show whether sections and grades were properly fixed.

Near the latter part of February, reports showed that the tests from the different schools had been studied, and selections made for the final set. The battery tests, in the two groups as planned, were printed at Beaumont High School under the caption of

DIFFICULTY TEST-- Beaumont Colored Schools,

Beaumont, Texas.

The tests were administered at the close of the semester with teachers of the different schools assist-

ing in the work of scoring. Results were tabulated in the office of the supervisor, with the assistance of Professor E. S. Richards, instructor in the Prairie View Extension School at Beaumont.

NOTE: Previously, teachers had been called together for the purpose of formulating acceptable answers for questions on their own subjects. These answers were converted into score sheets,"Keys" to aid in grading the tests.

Uniform DIRECTIONS for giving the tests were worked out and mimeographed copies made before the tests were given.

Due to the nature and form of some of the questions, scoring the test was somewhat laborious. With all the limitations herein expressed, the test may, nevertheless,be given with advantage at any time.

Copies of the battery tests follow.

CRITICISM OF THE BATTERY TEST

The questions submitted by the teachers did not, in the opinion of the supervisor, show much thought or careful preparation. Clear-cutness and definiteness were lacking. Some were vague and ambiguous, and were worded with little reference to the time element, seemingly.

DIFFICULTY TEST

BEAUMONT COLORED SCHOOLS

Beaumont, Texas

FORM I

Grades 3, 4, 5.

_____ Boy or Girl _____ Age _____

Birthday _____ Grade _____ Date _____

_____ State _____ School _____

er _____

Write Pupil's Scores Here

Test 1 Reading	
Test 2 Arithmetic	
Test 3 English	
Test 4 Geography	
Test 5 Health	
Test 6 Dictation	
Total Score	

Test No. 1

READING—Grades 3, 4, 5.

Name_____ Score_____

1. One summer when the hot weather came, all the Bennetts packed their trunks and went a the seashore. Mother carried a bag, Daddy carried a satchel, and Katy carried Baby. Each children carried a pail and a shovel. They all took turns carrying Kitty, for they couldn't leav little pet behind—not they. So they shut him in a basket and fastened down the cover. "Kit be frightened," thought the children. But he wasn't. He purred the whole way.

Write "YES" or "NO" on the dotted lines after the questions:

(a) Did they leave their little pet behind? _____

(b) Was the basket cover fastened down? _____

(c) Did the kitten purr in the basket? _____

(d) Was it the children who carried the kitten? _____

(e) Could the kitten get out of the basket? _____

FILL THE BLANKS in the following sentences:

2. Ned was crying because his little pony had died. Just then a fairy appeared and asked him was so sad. "Because," said Ned, "my dear little _____ is dead."

3. One day a lazy old owl came to the magpie and begged her to build a nice nest for her. "Why I build you a nest?" said the magpie. "If you were not so_____, you would build it yo

4. Jack got his hat and ran to the door. "Where are you going?" asked his mother. "To schoo _____, and ran off as fast as he could go.

5. A pretty squirrel once lived in a hollow tree near the window of a farmhouse. In the room wh window was a little girl named Nellie, lay sick. Every day the _____came to the and chattered as though to keep _____ from getting lonesome.

7. France was a far richer country than Scotland, and the English king had a much greater mind quor it. So he let _____ alone and and pretended that he had a right to the th

_____

8. John's father hurried to his office soon after eating his breakfast, but before going he told pull all the weeds in the garden and mow the lawn. When he returned in the evening hard day's work, he found the _____still growing in the garden and the _____ uncut

9. Bess has a dog and a kitten, but her two pets do not like each other very well. When the dog near, the _____ always runs away as fast as it can.

gray pussy saw a lark out in the field and thought it would make a fine dinner. "Come here, pret- lark," said the _____, "and I will show you the bell that hangs on my neck." But the ise lark said he did not care to see the _____and flew away.

om's kite was made of blue and red peper and was very pretty. One day he went out to a large eld to try it. There wsa a good wind, and ina short time the kite was so high that it seemed only dim speck in the heavens. "How wonderful," said Tom; "my _____ must be nearly as _____as the stars."

n Mondy Dick saw a red fox, a gray squirrel, and a black snake in the woods. The next day he saw brown rabbit and five brown mice in the field. He killed the fox and all the mice, but let the thers live.

WRITE YOUR ANSWERS ON THE DOTTED LINE:

(a) What was the boy's name? _____

(b) What was the color of the fox? _____

(c) On what day did he see the mice? _____

carriage drawn by four horses, dashed 'round the turn of the road. Within it, thrust partly out f the window, appeared the face of a little old man, with skin as yellow as gold. He had a low orehead, small, sharp eyes puckered about with innumerable wrinkles, and very thin lips which he ade still thinner by pressing them forcibly together.

VRITE "TRUE" OR "FALSE" ON THE DOTTED LINES:

(a) The carriage was drawn by four horses _____

(b) The carriage was turned over as it rounded the turn _____

(c) The man was little and old _____

W A LINE UNDER THE WORD OR WORDS THAT MAKE TRUE SENTENCES:

anals look like FORESTS LARGE DITCHES TOWNS

Many years had passed since the burning of Grand Pre, and far apart on separate coasts the Acadian easants were scattered. Friendless, homeless, hopeless, they wandered from city to city; from the old lakes to the softly southern Savannas. Friends they sought and homes; and many, despairing nd heart-broken, asked of tshe earth but a grave—and no longer a friend nor a fireside.

(a) A few years had passed since the burning of Grand Pre.

(b) Many years had Passed.

(c) A number of years had passed.

14. "Evening at the Farm" tell about CITY LIFE COUNTRY LIFE

15. Funny stories are SIMPLE HUMOROUS SERIOUS

16. The moral of a story NAMES THE CHARACTERS MAKES IT INTERESTING TEA

A LESSON

17. The Pilgrims were the first people to have BRICK HOUSES THANKSGIVING WIGV

18. George Washington was A GREAT SINGER THE FATHER OF OUR COUNTRY

A GREAT DISCOVERER

19. We observe Thrift Week to celebrate the birthday of THEODORE ROOSEVELT

BENJAMIN FRANKLIN ABRAHAM LINCOLN

21. Silent reading is done FOR THE TEACHER BEFORE THE CLASS WIT

NOISE

22. One evening in late autumn, I saw some beautiful birds come out of the bushes. They were as

as snow. They were swans. They flew in the air and sailed away to the warm South. The

that I saw were PIGEONS DUCKS SWANS CANARIES GEESE

20. I am a little dark-skinned girl. I wear a slip of brown buckskin and a pair of soft moccasins.

in a wigwam. The kind of little girl that I am is DUTCH FRENCH INDIAN ES

23. A swan looks like a LARGE DUCK SEA GULL KINGFISHER

25. Bicentenial means SIX MONTHS TWO HUNDRED ONE MILLION

26. An eagle is a SCAVENGER BIRD OF PREY SINGER

27. A bird with six senses is THE CROW THE PIGEON THE KINGFISHER

28. Red Riding Hood was not AFRAID BRAVE OBEDIENT

29. The camel is commonly thought of as THE FLEETEST ANIMAL THE SHIP OF T

DESERT THE TALLEST ANIMAL

30. Adventure tales are about BOYS GIRLS NEW EXPERIENCES

Test No. 2

ARITHMETIC Grades 3, 4, 5.

CTIONS: Look carefulyy at each example to see what you are to do. Work as many as you can ut making mistakes. Use this paper.

(1)

Add

8
2

(2)

$4 \times 3 =$

(3)

Subtract

7
3

(4)

Subtract

80
26

(5)

$2\overline{)\ 6}$

(6)

$4\overline{)\ 8}$

(7)

Multiply

674
4

(8)

$3\overline{)\ 9}$

(9)

Subtract

765
327

(10)

Subtract

932
597

(11)

Add

628
493

(12)

Multiply

275
6

(13)

9567
×6

(14)

$4\overline{)\ 308}$

(15)

Subtract

2961
1297

(16)

Subtract

6214
3498

(17)

Add

975
385
256

(18)

Subtract

9864
8458

(19)

Multiply

3174
43

(20)

$43\overline{)\ 2476}$

(21)

Multiply

6389
7

(22)

Add

834362014
791647262
562730819

(23)

$.15\overline{)\ 3.60}$

(24)

Subtract

6876241
4690618

(25)

$9\frac{3}{4} - 1 =$

(26)

$7\frac{1}{4} \times 3\frac{1}{5} =$

(27)

$56 + 5.6 + 4.25$

(28)

$.72\overline{)\ 46.08}$

(29)

Subtract

143
$38\frac{3}{4}$

(30)

Add

½ and ⅓

Test No. 3

ENGLISH—Grades 3, 4, 5.

Name _____

DIRECTIONS: Read each guestion carefully, and do as requested.

1. Write a boy's name. _____

2. Write the name of a month. _____

3. Fill the blanks with IS or ARE:

(b) The dog _____ barking. (a) The girls _____ singing.

4. Write four homonyms:

_____ _____ _____

5. Write the names of the days of the week:

_____ _____ _____

_____ _____ _____

6. Write a declarative sentence:

_____

7. Write an exclamatory sentence:

_____

10. Write an interrogative sentence:

_____

WRITE 'TRUE" or "FALSE" on the dotted lines:

8. This is a sentence: The birds are singing in the trees. _____

9. This is a sentence: Letter to grandmother. _____

13. This is a sentence: At the drug store. _____

14. IN THE FOLLOWING SENTENCES, UNDERSCORE THE CORRECT WORD:

(a) He road rode a horse.

(b) Do you hear here the music?

(c) I am going too two to town.

(d) Their there mother is singing.

WRITE THE OPPOSITES: hard _____ cold _____ bad _____

E CORRECTLY IN SENTENCES:

(a) may (b) can

(a) sit (b) set (c) capital (d) capitol

LUSTRATE THE FOLLOWING:

Two uses of the period.

Four uses of the comma.

Proper noun common noun collective noun pronoun

Masculine gender femine gender neuter gender

Write four contractions.

Write the plurals: wife _____ child _____ lady _____

Write the abbreviations: Post Office _____ pound _____ Mister _____

Saint _____ Reverend _____ Mistress _____

Correct these sentences:

(a) john and his sister are gone

(b) I am sorry but i can t go.

(c) Where are you going to?

(d) She was born May 5 1902

Correct these expressions:

(a) It is me. (b) It was him. (c) It was them.

DRAW A LINE UNDER THE GROUPS OF WORDS THAT MAKE SENTENCES:

(a) When winter came.

(b) The apples are ripe and mellow.

(c) Birds leaving for the South.

(d) The wind blew very hard.

Write four synonyms:

Write the date of your birth two ways.

Write four verbs which show action.

LL CORRECTLY THE BLANKS IN THE FOLLOWING:

Whom did you see? I_____Will.

Test No. 4

GEOGRAPHY—Grades 3, 4, 5

Name _____

DIRECTIONS: Read each question carefully, then do as requested. Answer all questions on this pa

DRAW A LINE UNDER THE CORRECT WORD:

1. Flour is made from OATS WHEAT CORN
2. Our best warm weather clothing is made of COTTON WOOL SILK
3. The place where rock is dug is called a MINE QUARRY PIT
4. Abraham Lincoln studied by A FIREPLACE A LAMP ELECTRICITY
5. Sheep are sheared in the SUMMER WINTER SPRING
6. Soil is made of BRICK ROCK CLAY
7. Corn is an important food of the FRENCH INDIANS JAPANESE
10. Natural gas comes from COAL A GAS WELL OIL
21. California is a NATION CITY STATE

WRITE "TRUE" or "FALSE" on the dotted line after each of the following sentences:

12. We live in the torrid zone. _____
13. Most of our rubber trees are found in Mexico. _____
15. Food, clothing and shelter depend upon the soil. _____
20. The most of our coffee comes from Mexico. _____
23. Rotation of the earth causes day and night. _____
24. The largest island in the world is Greenland. _____

COMPLETE THE FOLLOWING:

8. The capital of Texas is _____
9. The greatest occupation in the world is _____
11. The most important country in North America is
14. We get a great deal of our water from _____
18. The largest State, according to area, in the U. S. is _____
19. The chief executive office of the U. S. is the _____
16. How is soil made?

Name the continents.

Write on the dotted line the name of the largest continent _____

How are laws made?

What is the capital of the British Isles?

Name the countries to which the Guianas belong.

Where are the Andes Highlands?

Name the country in Europe that is shaped like a boot.

Who gave Columbus aid on the voyage in which he discovered America?

Test No. 5

HEALTH—Grades 3, 4, 5.

Name _____

WRITE "TRUE" or "FALSE" on the dotted lines after sentences:

4. Mosquitoes spread disease. _____
6. The dentist is our good friend _____
9. Foods which contain lime are not best for the teeth. _____
11. Flies and mosquitoes do not carry germs _____
12. Cereals furnish the body with energy and body-building material _____
14. Carbohydrates do not contain fats _____
15. We should not brush our teeth twice a day _____
18. Hard foods exercise the teeth and gums _____
19. Meals should be irregular _____
20. In the country a man either keeps a cow for himself or buys milk from his neighbor. He can visit his neighbor's barn and see for himself how the milk is handled. Most of you get milk from a milk dealer. The farmer sees to the purity and cleanliness of the milk in the city. _____
22. Exercise increases physical growth _____
23. Sleep and good nature go together _____
24. Food gives iron, starch and vitamins _____
26. A health rule is: Never blow both nostrils at the same time _____

COMPLETE THE FOLLOWING:

1. The names of the teeth are _____
7. We should sit, stand and walk _____
8. A model breakfast consists of _____
10. Milk is pasteurized to kill _____
16. When an accident happens, there are two things necessary to do. They are: _____

Foods contain _____

_____

The _____teeth last as long as we live and care for them.

Parts of the teeth are _____
Instruments for use on nails are _____

AW A LINE UNDER THE RIGHT WORD (or phrase):

It is best to play INDOORS OUTDOORS

One should bathe ONCE A MONTH MORE THAN ONCE A WEEK

One should sleep with windows SHUT OPEN

Perspiration causes BODILY HEAT ELIMINATION OF WASTE HARDENING OF THE SKIN

When one is reading, the light should come from OVER THE RIGHT SHOULDER DIRECTLY ABOVE OVER THE LEFT SHOULDER

The most desirable for good health is a VEGETABLE DIET MIXED DIET LIQUID DIET

Mary has a sore throat and is coughing badly, but wants to go to school. What do you advise about it? Write your answer and reason in the space below:

Test No. 6

DICTATION—Grades 3, 4, 5.

DIFFICULTY TEST

BEAUMONT COLORED SCHOOLS

Beaumont, Texas

FORM II

Grades 6, 7, 8.

---

ne _____ Boy or Girl _____ Age _____

t Birthday _____ Grade _____ Date _____

_____ State _____ School _____

cher _____

Write Pupil's Scores Here

Test 1 Arithmetic Reasoning	
Test 2 Arithmetic Computation	
Total Arithmetic Score	
Test 3 History	
Test 4 Science	
Test 5 English	
Total Score	

Test No. 1

MATHEMATICS—Grades 6, 7, 8.

Reasoning

Name_____

DIRECTIONS: Get the answers to these problems as quickly as you can. Write the answers on the d lines. Use blank paper to figure on if necessary.

1. It cost a party of 8 boys $43.20 to go on a camping trip. That was an average of how much per boy _____

2. A coat marked $45 was sold at a discount of 20%. Find the cost _____

3. From a bolt of toweling containing 19 yards Mrs. Jones wishes to make 1½ dozen towels of equal length. Find the length she can use for each _____

4. What will 25 crates of strawberries cost at 40 cents per crate? _____

5. The regular price $36.00, rate of discount 20%. Find the reduced price _____

6. 5 barrels of flour cost a baker $14.75. What is the price per barrel? _____

7. A merchant deposited in the bank on Monday $584; on Tuesday $759, and on Wednesday $597. How much did he deposit in the three days? _____

8. The number of square feet in a rectangle 8 feet long and 4 feet wide is
   10 20 12 32 _____

9. On a trip made from one state to another, a man traveled 217.6 miles the first day, 304.7 miles the next day, and 248.75 miles the third day. In the three days how many miles did he travel? _____

10. If it takes 3 hours, 15 minutes for a train to run from Cleveland to Columbus, and 2 hours and 50 minutes to run from Columbus to Cincinnati, how long does it take it to run from Cleveland to Cincinnati? _____

11. James earned $3.50 and spent half of it. How much had he left? _____

12. At 25c a yard, how much toweling can be bought for $2? _____

13. Simplify the following expression: $8x+6y-(2x-3y)$ _____

14. Find the value of x and check: $12x-16=8+6x$ _____

15. Two girls sell 37 bags of popcorn at a bazaar. One sells three more bags than the other. How many bags does each sell? _____

Test No. 2

MATHEMATICS—Grades 6, 7, 8.

Computation

ECTIONS: Get the answers to these examples as quickly as you can without making mistakes. Look fully at each example to see what you are to do. Do all work on this paper.

(1)

Add:

487	761	932
826	367	149
632	416	286

(2)

Add:

$\frac{1}{2}$
$\frac{5}{6}$
$\frac{2}{3}$

(3)

Exprss in fractions:

75% $66\frac{2}{3}\%$ $12\frac{1}{2}\%$ 25%

(4)

Add:

) 750, 685, 9 and 27
) 69, 97, 68 and 57

(5)

Add:

1 ft. 4 in.	7 gal. 3 qt.
2 ft. 9 in.	3 gal. 2 qt.
5 ft. 6 in.	1 gal. 1 qt.
8 ft. 7 in.	4 gal. 3 qt.

(6)

9.3+17.05+2.2+.702=

(7)

Multiply:

304	967
69	86

(8)

Draw a line under the number that makes the expression correct:

19% is equal to 19 .19 1900 1.9

(9)

Express as a decimal to three places: $\frac{1}{16}$

(10)

ess as percents:

5 .05 1.8 .9 .065

(11)

Find the value of "F" if k=8 and h=5:

$$F=\frac{kh^2}{4}$$

(12)

When x=2, y=3, z=5 find the value of: (x+y+z)

(13)

: $2a^2 - 3a - 4$, $5a^2 + 4a + 3$.

(14)

Subtract:

$8x^3-3ax+5$
$5x^3+2ax+5$

(15)

Find the product and check:

$x^2 - xy + y^2$ by $x^2 - xy + y^2$

Test No. 3

HISTORY—Grades 6, 7, 8.

Name _____ Grade _____ Teacher _____

Date _____ Age _____ Birthday _____ School _____

DIRECTIONS: Read carefully each question, and try to answer to the point.

1. What was the name of the first road through Texas? _____

2. Who was the first known white man in Texas? _____

3. Where was the "Neutral Ground?" _____

4. Name at least three early missions established in Texas: _____

(b) The first mission in Texas was established where? _____

5. Why do Texans celebrate April 21st? _____

6. Who was called the Father of Texas? _____

7. Name three Spanish settlements in Texas _____

8. Why do Negroes of Texas celebrate the 19th of June? _____

9. Who is the present Governor of Texas? _____

10. Who was first to establish free public schools in Texas? _____

11. What was the date of the Declaration of Texas' Independence? _____

12. Who is present State Superintendent of Public Instruction in Texas? _____

13. What caused the Pilgrims to come to America? _____

Describe and give reasons for the early hardships of the Plymouth colony

Explain why Washington's army was so poorly cared for at Valley Forge

What were the first steps in forming the U. S. Constitution?

Write opposite the names below the act that made each man famous:

Columbus

Balboa

La Salle

Magellan

List four methods of long-distance communication:

What caused the war between the States? Why was it called a civil war?

How has steam and electricity affected transportation?

21. Name some of the earliest animals domesticated

22. What did the Romans contribute to our modern civilization?

23. Name three city states

24. What did the Greeks contribute to our modern civilization?

25. What is meant by "prehistoric"?

26. In what sense did Philip of Macedon lay the foundation for the Empire of Alexander?

27. Outline the steps by which Alexander the Great established his power over the Near East:

28. What was meant by the Proletariat? What Roman politicians catered to the desires of the Proleta

29. Discuss the causes and effects of the growth of Slavery in the Roman Republic.

30. Under Julius Caesar was Rome a Republic or a Monarchy? Give reasons for your answer

Test No. 4

SCIENCE—Grades 6, 7, 8.

e _____ Grade _____ Teacher _____

_____ Age _____ Birthday _____ School _____

What things many hinder a child's growth? _____

_____

What physical defects commonly occur among children, and who should be consulted in having them corrected? _____

_____

Briefly tell of the workshops of our body _____

_____

_____

Give reasons for the importance of milk as a food. _____

_____

_____

In what way can boys and girls aid in the care of younger brothers and sisters? _____

_____

What is a narcotic? _____

Name some physical exercises _____

_____

Name five food substances _____

_____

_____

What are some of the main uses of water? _____

_____

_____

Name five health laws _____

_____

_____

11. Why is food inspected? _____

_____

_____

12. What is meant by (a) toxin? (b) anti-toxin? (c) epidemic? (d) quarantine? _____

(a) _____

_____

(b) _____

_____

(c) _____

_____

(d) _____

_____

13. How are communicable diseases prevented? _____

_____

_____

14. What can be done to prevent tooth decay? _____

_____

_____

15. What is done in your city to fight mosquitoes? _____

_____

_____

_____

_____

ON THE DOTTED LINE AFTER EACH OF THE FOLOWING SENTENCES, write "True" if the state is true, and "False" if the statement is false:

16. The growth and development of the body depend upon its receiving the proper kinds of food in the right amounts. _____

17. The liver is the largest gland in the body. _____

The alimentary system consists of a number of organs which, by working together, change the food which we eat into materials suitable for the use of the body. _____

The liver secretes a juice known as bile. _____

Excrete means to throw off matter. _____

Arteries bring both pure and impure blood to the heart _____

Gastric juice is the most important of all the digestive juices _____

Secrete means to throw off matter _____

A germ is a one-celled plant or animal, especially one likely to cause disease _____

A communicable disease is one that is not communicated from one person to another. _____

Protein foods are likely to be less expensive than other kinds. _____

The following is a good example of a well-balanced mixed diet: milk, beans, beefsteak, cottage cheese, Brazil nuts _____

Veins carry blood away from the heart. _____

Fresh vegetables and fruits have no particular value in one's diet. _____

Complete the following sentence: "The great French scientist who did so much in preventive medicine was _____."

Test No. 5

ENGLISH—Grades 6, 7, 8.

Name _____

1. Fill the blanks with words that express action:
   a. Mary _____ to the door.
   b. The baby _____ for the candy.
   c. The men _____.

2. Underline subject one time and predicate twice:
   a. Airplanes fly in the sky.
   b. The pretty little girl can dance.
   c. The streets are very muddy.

3. Use of double negative. Correct:
   a. I didn't say nothing.
   b. I don't believe nothing he says.
   c. I never saw none.

4. Write the date of your own birthday. Separate the parts of the date with commas. Write th
   of birthday of one of your friends. Separate the parts with commas.

   _____

   _____

5. How should the title of a book be written?

6. Write a short letter of thanks to your mother or father for a gift.

7. Arrange these words in alphabetical order:

   able, abide, egg, carry, dear, deer, girl, man, boy, baby

8. Capitalization. Correct:
   a. ellen and alice went to the store.
   b. i live near the neches.
   c. Our sperintendent's name is mr. moore.

9. Punctuate—commas and periods:
   a. Bring me the book Mary
   b. Yes John I will go.
   c. Your sister will come Mary if you are ill.

10. Name the parts of speech, define and illustrate.

    _____

    _____

These words tell of some certain sound. Make a sentence with each to show how it might be used

a. splash _____

b. cackle _____

c. groan _____

d. coo _____

e. whisper _____

f. tick _____

g. sputter _____

h. hum _____

i. crash _____

j. boom _____

k. babble _____

l. growl _____

Opposite each group of words place the correct form:

a. You was _____

b. He done _____

c. He come _____

d. Mary she _____

e. Them goods _____

f. Have went _____

g. I've got _____

h. Ain't _____

i. I seen _____

j. Gonto _____

k. Halfto _____

l. This here piece _____

m. That is her _____

Do you know these people? Write a good statement telling what each has done:

John D. Rockefeller

Henry Ford

Booker T. Washington

General Pershing

Herbert Hoover

Benjamin Franklin

Give five uses of the capital letter; illustrate each.

Name the kinds of sentences you have learned and illustrate each.

Why is it important to speak correctly in business? Why is it a social advantage to speak correctly?

17. What are current events? Illustrate.

18. Name the rules that will make story-telling effective.

19. What is a clause? A phrase? Illustrate each.

20. What is a book review? Of what use is it? Give a book review of a story you have read.

21. What is Grammar?

22. Why do we study Grammar?

23. State two rules governing the writing of a sentence.

24. Name the properties of pronouns.

25. Define: pronoun, antecedent,

26. What is a sentence? Name the parts of a sentence.

27. Name the four classes of pronouns.

28. Define: noun Name two kinds of nouns; give example of each.

29. In what way should a pronoun agree with its antecedent?

30. Classify the pronouns in the following sentences in one of the classes mentioned in question 27:

    a. Will you be promoted?

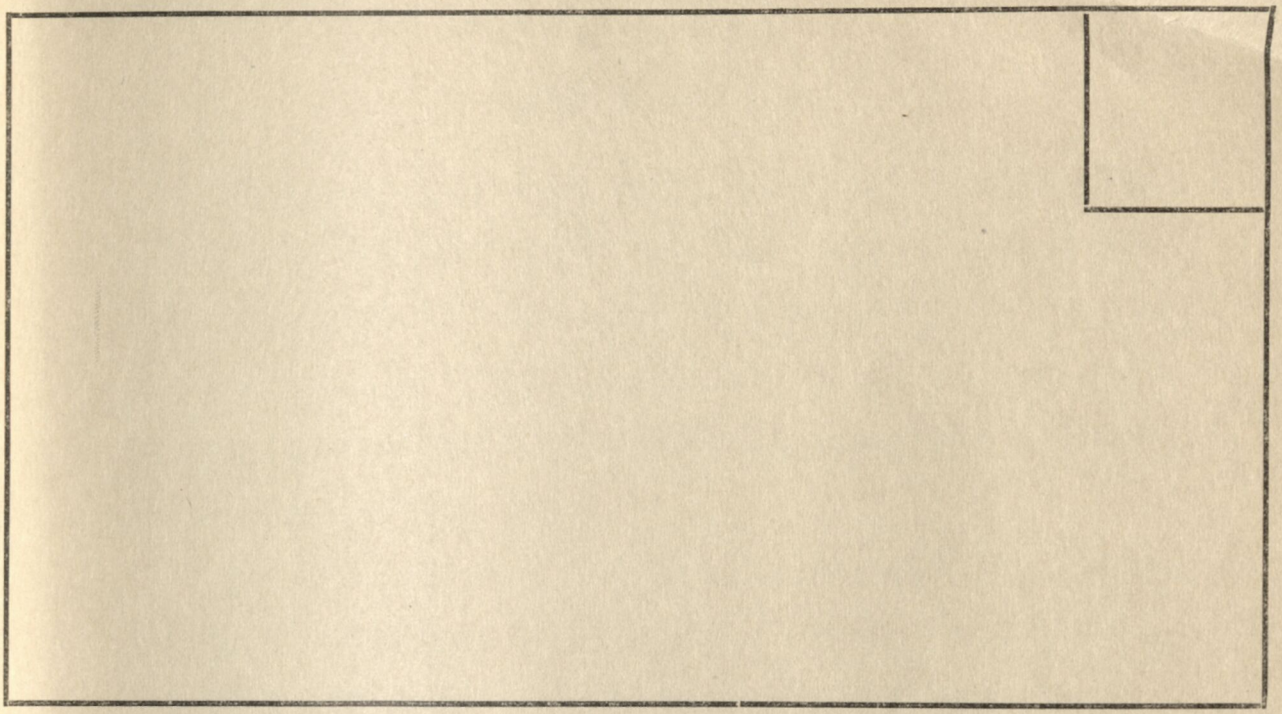
    b. This must be settled between you and me.

    c. Many of us have to go.

    d. What are you doing?

    e. Who is your mother?

20. Address the envelope drawn below:



REMEDIAL MEASURES

General Notes

"The most insistent question puzzled teachers ask concerning backward pupils is "What can be done about this problem?" The case may be fairly easy to diagnose, and the cause of failure quite obvious. The more perplexing problem for the teacher concerns ways and means of helping failing pupils.

Remedial work is at best only an emergency measure required because of inappropriate initial instruction. The time must come speedily when improved classroom teaching will reduce the need for remedial measures. The elaborate remedial programs in vogue today reflect static curricula and unpsychological classroom procedures. The better educational practice is to place the learner in a favorable environment rather than to try to make over the individual with the environment unchanged. More clearly formulated educational objectives would prevent learning disabilities. There is a limit to possible retraining with individual children. We need to pay more attention to preventative measures, to changes in the classroom, methods, goals, and assignments.

Progressive practice in teaching the tools--reading, writing, arithmetic, and spelling-- will aid in

preventing failures at the outset and in formulating plans for remedial work.

The most common therapeutic measures in vogue are scolding, punishing, threatening, keeping after school, and overloading the child with homework. The trouble with these measures is a lack of fitness of the punishment to the crime or the criminal. They require effort and sometimes abilities that the child may not possess. They assume on the part of the child an ability to lift himself by his own boot straps. Punishing the child for delinquent achievement does not alter his learning ability nor make conditions for learning more satisfactory. Keeping a child after school affords more repetition but without sufficient elapse of time between practice periods to be beneficial. A common therapeutic measure, talking things over with the child, assumes more insight into problems than most children possess and consequently has little value except as one aspect of diagnostic work.

Requiring pupils to repeat a grade is still the most popular though one of the least satisfactory remedial measures. It is expensive without being effective as a general principle. It takes no account of the retraining needs of the children, and should be displaced in most cases by methods that are related to

diagnostic findings in each case. Forcing a child to repeat work without any alteration in method of approach and without attention to specific learning habits is valueless in the vast majority of cases. As one educator expressed it, "We need to put the oil where the squeak is." Keeping children in after school to write the day's spelling lesson over twenty-five times or assigning more homework for the deficiency is no more soundly or healthfully corrective than locking up criminals in idleness without any scientific therapeutic program.

Remedial instruction is more difficult than initial normal instruction because wrong habits must be destroyed and unfavorable attitudes overcome. General remedies applied in wholesale fashion, repetition of drill in the way it was applied routinely before the diagnosis, ordinarily will be fruitless, and in no way conducive to the removal of wrong habits. Successful remedial work is not accomplished by handing out to the child a ready-made set of drill work, or study materials with the instructions, "Do these as quickly as you can." That method of instruction is more often the cause than the cure of disabilities. Usually the program of remedial work is too narrowly conceived..... Often remediation requires doing something to the school or the curriculum rather than to the child. It may in-

volve reclassification or regrouping. It usually requires experiment with non-traditional teaching methods. Direct teaching to remove deficiences is in many cases less effective than removing obstacles to learning and working for changed attitudes to make learning possible. In many situations the only recourse is to rethink the child's entire school learning problem and to remake his program. Remedial work may require parent education and guidance more largely than any direct retraining of the child in skills or tools of learning.

In a large measure, the writer is indebted to Gertrude Hildreth, Psychologist, Lincoln School of Teachers' College, Columbia University, New York, City, for the information herein given.

REMEDIAL EFFORTS PUT FORTH
In the Beaumont City Schools

In beginning work of remediation in the Beaumont City Schools we found certain measures being used. Some have already been enumerated as: scolding, punishing, threatening, keeping after school, personal conferences with children, overloading the child with homework. The educative value of each of these measures has been discussed also.

We encountered our first difficulty in trying to

enlist the classroom teacher in helping us to make a new approach in dealing with the children that needed help.

Finally with the assistance of Superintendent M. E. Moore the classroom teachers laid aside the traditional methods that they had been using and submitted to the more scientific method of giving diagnostic tests in order to locate the cause of the deficiency. Causes, both physical and mental, as have been discussed in another paragraph in this dissertation, were found. To remedy these and all deficiencies found, devices given by Gray and Gates were used with effect. In our diagnosis we also found that home environment had much to do with some of the children listed as deficient. To remove this handicap the classroom teacher was encouraged to better acquaint herself with the homes of these retarded children, and enlist the parents in this work of remediation by having them improve the quality of the child's home-life.

In his talks with the teachers, the supervisor stressed the fact that interest in learning contributes enormously to success--and that interest supplies the motive power of learning.

SPELLING

In October, 1933, the late T. J. Charlton, principal of charlton-Pollard High School, requested that we give a spelling test to 72 pupils in the low sixth grade.

Using the "ONE HUNDRED SPELLING DEMONS," we administered the test to the children in two groups--one consisting of 34 children and the other 38. The median for Group I was 88.5, with a score range of 99-30; and for Group II the median was 90 with a score range of 99-26. Of the 72 pupils tested, 26 fell below the medians of both groups. the median score for this retarded group was 69.5, with scores ranging from 82 to 26.

All of the pupils were then subjected to audiometer and eye tests. Results of these tests revealed that a large percentage of the pupils was defective in hearing and vision, (even among those pupils who rated above the medians of their group).

It is unfortunate that a complete record of the aural test is not available at this time. Only those pupils in the "above median" group are accounted for.

The reactions of the 72 children were reported to Principal Charlton who turned the children over in two groupings--one comprising the 26 below-median pupils, the other the 46 above-median pupils,to a teacher selected to give remedial instruction to Group I; the

second group was to be given regular classroom instruction.

Mrs. C. L. D. Edwards, English teacher of junior high school pupils, Charlton-Pollard High School, and the teacher selected by Mr. Charlton to give the remedial instruction, tells how she did it:

> A class of about fifty children and a smaller group of children who, through a process of elimination from the supervisor's office, were found to be very poor spellers, were given to me by the principal, Professor T. J. Charlton, for the purpose of making an actual test in remedial teaching. Of course the subject was spelling, and the vehicle to be used was the "One Hundred Spelling Demons." The group was given a test, and it was found that they misspelled an average of from 20 to 75 words each. Another test was given in order to find out which words were missed the greatest number of times. After this, I went to work.
>
> We had only two weeks in which to complete the test. A 45-minute period each day for this period of time was divided as follows: (1) a word drill, (2) a written test, (3) assignment for next lesson, and (4) sometimes, a three to five-minute oral drill, whenever we had time at end of written tests.
>
> The word drill was carried out in this way: the words assigned, eight to ten in number (five is a good assignment for new words), were written on the blackboard, one at a time. Each word was pronounced by a pupil, and used in a sentence by several others. This insured his ability to pronounce and his knowledge of the meaning of the word. The word was then erased and a child asked to remember what he had seen and to spell it orally. Each child had his slip of paper. Then words were called out for him to spell.
>
> Some days the children were given 10 words, others 15, 20, or 25. After writing, the words were spelled for them. Sometimes they would check their own work, and sometimes they would exchange papers. Incorrect words were noted and written correctly and made up the assignment for the next day's intensive study lists.

Each child was thus appealed to through his eyes, his ears, his hands. Much friendly rivalry was created in the written tests as well as in the short oral drill at the end. Several spelling games were used.

At the end of the two weeks' period, the median score for the pupils given remedial instruction had been raised to 92.5 (from 69.5), with scores ranging from 99 to 60. Records were kept for each day of the two-week period.

SUMMARY OF PROGRESS MADE AS A RESULT OF REMEDIAL TEACHING: SPELLING

Twenty-one 6th. Grade Pupils, Charlton-Pollard School

Table XII

Point Score 1st. Test	Point Score 2nd. Test	Percent of Progress	No. of Pupils
82	85	3.6	1
82	94	14.6	1
82	89	8.5	1
82	96	17.0	1
81	95	17.2	3
79	92	16.4	1
75	91	21.3	1
75	99	32.0	1
72	99	37.5	1
70	97	38.5	1
69	95	37.6	1
66	95	40.8	1
58	86	42.2	1
54	72	33.3	1
50	88	76	1
39	84	115.4	1
30	60	100.0	1
30	65	116.6	1
26	97	273.0	1
Average Percent of Progress		51.23	

SUMMARY OF PROGRESS MADE AS A RESULT OF REGULAR CLASSROOM INSTRUCTION

Forty-three 6th. Grade Pupils, Charlton Pollard School

Table XIII

Point Score 1st. Test	Point Score 2nd. Test	Percent of Progress	No. of Pupils
99	99	0	1
98	99	1.02	1
98	97	-1.02	1
98	98	0	1
97	99	2.06	1
97	95	-2.06	1
97	92	-5.1	1
97	96	-1.02	1
96	100	4.8	1
96	98	2.08	1
96	97	1.04	1
96	99	1.3	1
96	98	2.08	1
95	90	-5.2	1
95	95	0	1
94	96	2.02	1
94	99	5.3	1
93	97	4.3	1
93	92	-1.07	1
93	99	6.4	1
93	95	2.1	1
92	91	-1.08	1
92	97	5.4	1
92	98	6.5	1
92	94	2.1	1
91	96	5.4	1
91	92	1.09	1
91	97	6.5	1
91	88	-3.2	1
91	85	-6.5	1
90	92	2.2	2
89	97	8.9	2
89	95	6.7	2
88	89	1.1	1
88	90	2.2	1
87	92	5.7	1
84	77	-8.3	1
84	90	7.1	1
84	81	-3.5	1
Avg. Percent Progress...		2.86	

It is noteworthy that all pupils receiving remedial instruction made advancement, while eleven of those receiving regular classroom instruction fell below the mark attained in the first test, and three remained static.

CORRECT RESPONSES BY AN ADVANCED ARITHMETIC CLASS

On the Woody-McCall Test in Mixed Fundamentals

Table XIV

Problem	No. Correct Answers	Problem	No. Correct Answers
1	72	18	54
2	72	19	49
3	68	20	60
4	72	21	37
5	70	22	42
6	64	23	51
7	65	24	25
8	71	25	37
9	69	26	32
10	64	27	25
11	69	28	29
12	72	29	28
13	61	30	11
14	59	31	7
15	67	32	8
16	60	33	3
17	40	34	1
		35	7

Number of Pupils: 75

Scores ranged from 2 to 32. Class Median..... 24

Reports to principal and teachers of these pupils embraced suggestions for the proper remedial teaching in certain phases of addition, subtraction, multiplication and division; and the proper use of decimals. Care in the reduction of all common fractions to lowest terms was also stressed; since, in this test, no credit was allowed problems otherwise correctly solved.

REPORT: on STONE'S NARRATIVE READING TESTS

for Low Sixth Grade---Charlton-Pollard High School

October 12, 1934

The following Diagnostic Chart filled in from the pupils' scores shows that children fall into certain ability groupings as indicated:

Group I	Group II	Group III
Rapid-Careless Readers	Superior Rate; Average Comprehension	Superior Rate; Superior Comprehension
No. Pupils: 5	No. Pupils: 0	No. Pupils: 3
Group IV	**Group V**	**Group VI**
Average Rate; Inferior Comprehension	Average Rate; Average Comprehension	Average Rate; Superior Comprehension
No. Pupils: 12	No. Pupils: 15	No. Pupils: 10
Group VII	**Group VIII**	**Group IX**
Inferior Rate; Inferior Comprehension	Inferior Rate; Inferior Comprehension	Inferior Rate; Inferior Comprehension
No. Pupils: 26	No. Pupils: 30	No. Pupils: 15

	Rate	Comprehension
Class Medians:	148	8
Grade Norms:	170	12.5

Total No. Pupils.....116

REPORT: Stone's Reading Tests (Continued)

REMEDIAL TEACHING SUGGESTED: After a careful study of the results and diagnosis of each pupil, the content and method used by the teacher should be adapted to the needs of each group, as indicated in the chart, over a period of a few weeks. The special objective will be to improve the narrative-reading ability of those who are below a reasonable standard, and to provide a rich experience in narrative reading for the others. Rapid-careless readers will need training that will improve their comprehension. The slow reader who comprehends well (Group IX) will need speed exercises with some check on comprehension.

SOME RESULTS OF THE TESTING PROGRAM

A careful study of test data has afforded much valuable information for the solution of school problems, particularly with reference to teaching and learning. Some of the contributions of such a program are here pointed out:

I. Administrative Purposes

1. School records: Results of intelligence and achievement tests throw light on any question that comes up concerning the educational treatment of a pupil, and show the status of the pupil's achievement at any time.

2. Classification: Records on achievement and intelligence tests provide a basis for deciding in what grade and class each pupil should be placed for optimum learning.

3. Standards: Test results show whether achievement is good for the entire school in all subjects together and also in each subject.

II. Supervisory Purposes:

1. Analysis of achievement: Achievement test results show how achievement in each subject compares with achievement in the

other subjects. Analytical tests give the relative achievement achievements in the different parts of a subject in each grade. Here is the basis for placing right emphasis in instruction.

2. Evaluating teaching: The data indicate which teachers need most help, and in which subjects or parts of subjects.

III. Instructional Purposes:

1. Inventory of pupil's ability: The test results for each class analyzed at the beginning of the term give the status of each pupil so that the teacher may take appropriate steps to remedy weaknesses before beginning the work of the new term, and may conduct teaching in the light of individual ability. Also, pupils may progress more rapidly when grouped for instruction in each class or subject according to the results of achievement tests.
2. Quality of achievement: Instructional tests given at the end of each unit show what further help each pupil needs on the unit before he is ready to go ahead to the next unit.
3. Remedial work: Analytical tests used near the end of the term tell what remedial teach-

ing and review are needed for each pupil.

4. Measure progress: Instructional tests give an inventory of progress during the term. Achievement test results show progress at the end of the term and help to determine promotions.

In handling the results, the necessary stastistical treatment has been applied, and an attempt was made to interpret them so that most benefit could be derived from them. Scores were expressed as grade equivalents, distribution of scores or grade equivalents were made, medians were computed, and the like.

Intelligence test results were expressed as intelligence quotients and mental ages. Achievement test scores were expressed as grade equivalents in terms of norms and in terms of the medians for the school system. Instructional test scores were expressed as percentile ranks to measure progress. Median scores on the parts of analytical achievement test were compared with the norms to determine in which parts achievement was found to be lowest. Distributions of scores showed the range of ability and achievement in each class and the pupils who were doing the poorest and the best work.

In the Beaumont Colored schools, an effort has

been made to follow up testing with action. From the foregoing reports, it will be seen that pupils were classified according to their achievements and abilities. Plans of action were made for the improvement of the work in particular subjects and grades. See Section on Remedial Measures. Explanations on how they might improve the work of their classes on the basis of the results were given to interested teachers.

SPELLING, LANGUAGE, ARITHMETIC

Tests in spelling, language, and arithmetic were given to several hundred children in the three elementary schools at the close of the term, as a basis for classifying those pupils for junior high school in the fall term.

From T-scores found, pupils were formed into A and B groups, according to the grade. Reports on tests were given elementary school principals--while report on groupings was submitted to the high school principal.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

To summarize, then, a historical background of educational measurement dates back into antiquity; and embraces almost as many sources or origins as there are phases of the movement. The contributions made by many educators and specialists in the field are discussed, as are the initiatory steps taken by Superintendent M. E. Moore in setting up the movement in the Negro schools of Beaumont.

In the twenty years in which tests have been used, they have come to be regarded as an essential part of the work of the Beaumont schools. Types of tests and their uses, with Tables and Charts for clearness, have been given consideration. A more or less detailed description of the Beaumont teachers' venture in test making, under the leadership of Superintendent Moore, has been given.

In the section on remedial work, emphasis has been placed on the use of remedial devices as are recommended by educational leaders of today, in contradistinction to the use of the old measures.

Much value has been derived from the program of educational testing in the Beaumont Colored Schools.

RECOMMENDATIONS

To anyone who may be interested in the uses of tests, the following suggestions are offered:

1. Subscribe to at least one of the educational journals which publish material with regard to tests and their uses. Pressey lists them as follows:

   a. Journal of Educational Research: Public School Publishing Company, Bloomington, Illinois.

   b. Journal of Educational Method: World Book Company, Yonkers-on-Hudson, New York.

   c. Journal of Educational Psychology: Warwick and York, 10 E. Centre Street, Baltimore, Maryland.

   d. Elementary School Journal of School Review: (according as the reader is interested primarily in elementary or secondary schools): Department of Education, University of Chicago, Chicago, Illinois.[1]

2. Get in touch with the College of Education of your state university, or some similar reliable source of information regarding progress in the development of, and the use of tests. Some are:

   a. The Bureau of Educational Research at Ohio State University, Columbus, Ohio.

   b. The Bureau of Educational Reference and Research at the University of Michigan, Ann Arbor, Michigan.

   c. The Bureau of Educational Measurement and Standards, Kansas State Normal School, Emporia, Kansas.

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1 Pressey, loc. cit.

3. Try out tests, as soon as possible, to get first-hand experience in work with tests. As with any line of work, the values and the problems of educational measurement can be adequately understood only when one has some background of actual experience in the field.
4. Initiate a system of records whereby cumulative results of tests may be readily available.

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